

Dirt-encrusted and dragon millipedes (Diplopoda: Polydesmida: Paradoxosomatidae) from Queensland, Australia

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Abstract

Three unusual new Paradoxosomatidae are described from tropical north Queensland. *Desmoxytoides hasenpuschorum* **n. gen., n. sp.** closely resembles the dragon millipedes *Desmoxytes* of southeast Asia, but differs in gonopod details. *Tholerosoma monteithi* **n. gen., n. sp.** and *T. corrugatum* **n. sp.** are remarkable for their tightly attached coating of soil particles.

Key words: Diplopoda, Polydesmida, Paradoxosomatidae, dragon millipede, Queensland, Australia

Introduction

In the most recent taxonomic study of Queensland Polydesmida, the Dutch diplopodologist C.A.W. Jeekel (1987) noted that knowledge of the State's most speciose family, Paradoxosomatidae, was "extremely fragmentary", and that his own collecting efforts during a 1980 visit had been largely unsuccessful. He remarked (p. 11) that "...a methodical survey of the soil fauna by local investigators is needed to obtain a satisfactory conspectus of the millipede fauna of Queensland." A survey of this kind was initiated in the late 1970s by Curator of Insects Geoff Monteith and his colleagues at the Queensland Museum. The Museum now houses many thousands of millipede specimens from well-documented collections at hundreds of sites around Queensland.

Among these are specimens of two unusual new genera of paradoxosomatids. One closely resembles the dragon millipede genus *Desmoxytes* from Southeast Asia (Golovatch & Enghoff 1994; Nguyen Duc Anh, Golovatch & Anichkin 2005) in paranotal form and metatergite sculpture, but has a simpler gonopod telopodite with an unprotected solenomere. Species in the second genus are tightly encrusted with soil particles, an anomaly in the typically smooth-bodied Australian Paradoxosomatidae.